

Serial No.: 10/757,159  
 Examiner: Laura C. Schell  
 Group Art Unit: 3767

### STATUS OF CLAIMS

Claims 11-20, 22, and 23 are presently pending and under examination.

Applicant has amended claim 11. Support for the amendment to claim 11 is found, *inter alia*, in page 5, lines 3-11 of the specification, Figures 1 and 2, and the claims as originally filed. Applicant submits that no new matter has been added.

### REMARKS

#### Informalities

In the Office Action, the Examiner states that four foreign patent documents listed on the submitted IDS have not been considered as copies of these documents have not been submitted.

In response, Applicant states that copies of these foreign patent documents were submitted in an earlier patent application application (U.S. Serial No. 09/487,436, now U.S. Pat. No. 6,699,214), and the earlier application was properly identified in the Information Disclosure Statement that it was being relied upon for an earlier effective filing date under 35 U.S.C. 120. Applicant states that the IDS submitted in the earlier application complies with 37 C.F.R. 1.98(a)-(c). Thus, copies are not required to be submitted for the present application according to 37 C.F.R. 1.98(d)(1).

#### Rejection Under 35 U.S.C. §102(b)

Claims 11, 12, 17, 18-20, 22, and 23 were rejected under 35 U.S.C. § 102(b) as being anticipated by Hicks (U.S. Patent No. 2,825,134). In the Office Action, the Examiner takes the position that Hicks discloses the claimed driving system for use with an injector system and the driving system has a drive mechanism, an actuator coupled to the drive mechanism and a rotatable interfacing member coupled to the drive mechanism for coupling with the mixing member to rotate the mixing member when the interfacing member is driven by the drive mechanism.

In response, Applicant respectfully traverses the rejection over Hicks. Applicant submits that the invention of claim 11, as amended, is not anticipated by Hicks.

Hicks discloses a mixing member for mixing dental impression materials that is encased within a chamber ("the inner end of the rod 21 that is within the inner casing 1 has a mixing

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element 22 secured thereto" (col. 2, lines 70-72). No mixing occurs beyond this inner casing 1. As illustrated by Fig. 1 of Hicks, once the dental material is mixed by mixing element 22 consisting of mixing blades 24, the material is "discharged through the needle-like end 39 of the nozzle 37 for depositing the impression material accurately and solidly in a cavity or around the necks of the teeth." (col. 3, lines 70-75).

Hicks simply does not teach the invention as claimed, and at the very least, fails to teach the various elements of amended independent claim 11. As amended, independent claim 11 is directed to the following:

A driving system for use with an injector system, the injector system comprising: a housing defining a lumen and having an output end and a driving system connection end; *a needle assembly coupled to the output end of the housing for coupling to a needle*; and a mixing member extending through the lumen *from the driving system connection end to at least the output end*; and the driving system comprises:  
 a drive mechanism;  
 an actuator coupled to the drive mechanism to actuate the drive mechanism; and a rotatable interfacing member coupled to the drive mechanism for coupling with the mixing member to rotate the mixing member when the interfacing member is driven by the drive mechanism, wherein the mixing member *is rotatable in the needle assembly and the lumen*.

(emphasis added).

For a reference to anticipate a claim it must disclose each and every element of the claim. See MPEP 2131 and cases cited therein, *especially Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989) and *In re Marshall*, 578 F.2d 301, 304, 198 USPQ 344, 346 (Fed. Cir. 1978). The Hicks reference fails as an anticipatory reference because it fails to teach several required elements. Hicks does not teach a needle assembly coupled to the housing. It does not teach a mixing member that extends from the driving system connection end to at least the output end of the housing. It does not teach that the mixing member is rotatable in the needle assembly as well as the lumen. Thus, since the reference does not disclose each and every element of the claim, Applicant states that Hicks fails as an

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anticipatory reference and respectfully requests that the Examiner reconsider and withdraw the rejection over Hicks.

Claims 12, 17, 18-20, 22, and 23 dependent directly on claim 11, and the rejection of those claims fails at least because of the fundamental defect discussed above.

Rejection Under 35 U.S.C. §103(a)

Claims 13-16 were rejected under 35 U.S.C. § 103(a) as being anticipated by Hicks (U.S. Patent No. 2,825,134) in view of Critchlow et al. (US 2003/0171712). The Examiner takes the position that Hicks discloses the device substantially as claimed including a motor. However, the Examiner states that Hicks does not disclose a low torque motor, a battery or a switch. Critchlow, according to the Examiner, discloses a hand-held syringe and it would have been obvious to have modified Hicks with the specific motor, energy source and switch, as taught by Critchlow, in order to provide an injector system that is powerful enough to mix and inject such viscous material as well as be hand-held and portable.

In response, Applicant respectfully traverses the rejection and its accompanying remarks. Applicant asserts that the Examiner has not provided sufficient evidence to support a *prima facie* case of obviousness. The Examiner bears the burden of establishing a *prima facie* case of obviousness based upon the prior art. The Examiner can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. *In re Fritch*, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992). An adequate showing of motivation to combine requires "evidence that 'a skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed.'" *Ecolochem, Inc. v. Southern Calif. Edison Co.*, 227 F.3d 1361, 1375, 56 USPQ2d 1065, 1076 (Fed. Cir. 2000).

Applicant states that for the reasons stated above with respect to the rejection over Hicks, Hicks does not teach the claimed invention as stated in amended independent claim 11, upon which rejected claims 13-16 depend. Critchlow does not correct the infirmities of Hicks. There is no teaching or suggestion in Critchlow that would lead one of ordinary skill in the art to

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somehow adapt the driving assembly of Hicks to create the claimed driving system. Critchlow teaches a complex computer-controlled drive mechanism for pressurizing fluid for injection into a patient. Critchlow teaches a drive mechanism that is connected to a plunger disposed within a syringe and which is motorized to pressurize fluid contained in the syringe. When confronted with the same problems as the inventor and with no knowledge of the claimed invention, Applicant asserts that one of ordinary skill would not be motivated to select the elements from the cited prior art references for combination in the manner claimed.

There is nothing in Critchlow or Hicks to indicate that the fluid-pressurizing driving mechanism of Critchlow would even be able to function if attached to the mixing member of Hicks. In fact, Applicant asserts that there is no evidence to show that the required pressurization of the fluid by the driving mechanism can even occur when the mixing member of Hicks is present in the body of the syringe. There is no motivation to combine the decades old technology of Hicks (issued 1958) for mixing dental impression materials with the computerized pressurized-fluid injection technology of Critchlow to arrive at the present invention. Even if it were assumed that such motivation to combine exists, Applicant states that one of ordinary skill in the art would be faced with undue burden in somehow retrofitting the Hicks device with the fluid pressurizing mechanism of Critchlow to arrive at the present invention.

For at least these reasons, it is respectfully submitted that claims 13-16 are patentable over the cited references.

### CONCLUSION

Applicants respectfully submit that all pending claims are in condition for allowance, early notification of which is earnestly solicited. Should the Examiner be of the view that an interview would expedite the application at large, request is made that the Examiner telephone the undersigned attorney at (908) 518-7700, ext. 7 in order to resolve any outstanding issues.

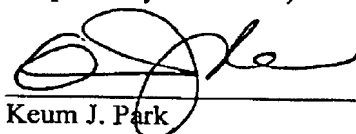
### FEES

The Office is authorized to charge any fees required, including the fee for a one-month extension of time to deposit account number 50-1047.

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Attorney for Applicant  
Mayer & Williams PC  
251 North Avenue West, 2<sup>nd</sup> Floor  
Westfield, NJ 07090  
Tel.: 908-518-7700, ext. 7  
Fax: 908-518-7795

Respectfully submitted,



Keum J. Park  
Registration No. 42,059

**Certificate of Facsimile Transmission**

I hereby certify that this correspondence and any document referenced herein is being sent to the United States Patent and Trademark office via Facsimile to: 571-273-8300 on 5/14/07.

Marjorie Scariati  
(Printed Name of Person Sending Correspondence)

Marjorie Scariati  
(Signature)